

COMPACT BROADBAND VIVALDI ANTENNA FOR WIMAX APPLICATIONS

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A compactly designed Vivaldi antenna for wideband applications is proposed. The main purpose of this antenna is for WiMAX applications and also satisfying the bandwidth quotation of 5G applications. As technology meets an improvisation day by day, in future, there will be an immediate and essential need for a device for WiMAX application. Thus to meet future demands, we have proposed a compact design of Vivaldi antenna. We have used Vivaldi antenna for its wide range of frequency usage. The bandwidth has been increased up to 10.5 GHz in the frequency range of 32GHz to 42GHz with center frequency at approximately 36GHz. This modified antenna demonstrates that it may be an alternative device for other single band antenna design.

Index Terms—Wideband antenna, WiMAX applications, 5G bandwidth, Single band antenna.